REMARKS

Claims 1-36 and 38-41 are currently pending in the application. Claim 37 has been canceled without prejudice or disclaimer. New claims 38-41 have been added. Applicant respectfully submits that no new matter has been added. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

Claims 7-12, 25-34, and 36 have been indicated as allowable. In addition, claims 5, 14-16, and 18-19 have been objected to as being dependent upon a rejected base claim, but have been indicated as allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's indication of allowable subject matter.

Claims 1, 3, 6, and 35 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,516,185 to MacNally ("MacNally"). Applicant respectfully submits that MacNally fails to teach or suggest at least one of the distinguishing features of independent claim 1, namely, determining filter coefficients based on relative signal strengths of a desired portion and an adjacent portion and low pass filtering a second processed signal utilizing the filter coefficients to produce a third processed signal.

MacNally relates to a direct conversion type transceiver system incorporating an offset correction and automatic gain control system. The automatic gain control system includes an amplifier for amplifying a baseband signal which is directly converted from a received incoming RF signal, a feedback offset canceller controllably canceling DC offset, an automatic gain controller controlling gain of the amplifier, and a feed forward offset canceller coupled to a signal peak detector.

In contrast to claim 1, there is no teaching or suggestion by MacNally of determining filter coefficients based on relative signal strengths of a desired portion and an adjacent portion. In MacNally, a signal amplitude window comparator in used to determine if an amplitude, as calculated from peak detectors, is within certain limits. If the amplitude of the signal ever goes outside increased window limits, then the window reverts back to inner window limits and LNA

and baseband gain are allowed to be altered by the AGC gain. Additionally, in MacNally, an offset integrator is used to cancel DC offset voltage at two locations. I channel and Q channel signals, which are offset corrected signals, are summed and input into a gain control window comparator/hysteresis. In contrast to MacNally, in claim 1, a first processed signal including a desired portion and an adjacent portion determines filter coefficients. Applicant respectfully submit that claim 1 distinguishes over MacNally and is in condition for allowance. Withdrawal of the rejection of claim 1 as anticipated by MacNally is respectfully requested.

Dependent claims 3 and 6 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 3 and 6 distinguish over MacNally and are in condition for allowance. Withdrawal of the rejection of dependent claims 3 and 6 is respectfully requested.

Independent claim 35 relates to a receiver for adaptively filtering a signal. Applicant respectfully submits that MacNally fails to teach or suggest at least one of the distinguishing features of independent claim 35, namely, means for determining filter coefficients based on relative signal strengths of a desired portion and an adjacent portion and means for low pass filtering a second processed signal utilizing the filter coefficients to produce a third processed signal.

In contrast to claim 35, there is no teaching or suggestion by MacNally of determining filter coefficients based on relative signal strengths of a desired portion and an adjacent portion. In MacNally, a signal amplitude window comparator in used to determine if an amplitude, as calculated from peak detectors, is within certain limits. If the amplitude of the signal ever goes outside increased window limits, the window reverts back to inner window limits and LNA and baseband gain are allowed to be altered by the AGC gain. Additionally, in MacNally, an offset integrator is used to cancel DC offset voltage at two locations. I channel and Q channel signals, which are offset corrected signals, are summed and input into a gain control window comparator/hysteresis. In contrast to MacNally, in claim 35, a first processed

signal including a desired portion and an adjacent portion determines filter coefficients. Applicant respectfully submit that claim 35 distinguishes over MacNally and is in condition for allowance. Withdrawal of the rejection of claim 35 as anticipated by MacNally is respectfully requested.

Claims 37 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,953,380 to Ikeda ("Ikeda"). Claim 37 has been canceled, thus rendering the rejection to claim 37 moot.

Claims 13, 17, 20-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over MacNally. Applicant respectfully submits that MacNally fails to teach or suggest at least one of the distinguishing features of independent claim 13, namely, a filter coefficient determiner, the filter coefficient determiner adapted for receiving a digital signal or a derivative thereof and producing as output a filter control signal based on relative signal strengths of a desired portion and an adjacent portion.

In contrast to claim 13, there is no teaching or suggestion by MacNally of a filter coefficient determiner for receiving a digital signal or a derivative thereof. In MacNally, a signal amplitude window comparator in used to determine if an amplitude, as calculated from the peak detectors, is within certain limits. If the amplitude of the signal ever goes outside increased window limits, then the window reverts back to inner window limits and LNA and baseband gain are allowed to be altered by the AGC gain. Additionally, there is no teaching or suggestion by MacNally of the filter coefficient determiner producing as output a filter control signal based on relative signal strengths of a desired portion and an adjacent portion. In MacNally, an offset integrator is used to cancel DC offset voltage at two locations. I channel and Q channel signals, which are offset corrected signals, are summed and input into a gain control window comparator/hysteresis. In contrast to MacNally, in claim 13, a filter coefficient determiner receives a digital signal or a derivative thereof and not a compensated/offset corrected signal as in MacNally. Applicant respectfully submit that claim 13 distinguishes over MacNally and is in condition for allowance. Withdrawal of the rejection of claim 13 is respectfully requested.

Dependent claims 17 and 20-24 depend from and further restrict independent claim 13 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 13, dependent claims 17 and 20-24 distinguish over MacNally and are in condition for allowance. Withdrawal of the rejection of dependent claims 17 and 20-24 is respectfully requested.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over MacNally in view of U.S. Patent No. 6,141,372 to Chalmers ("Chalmers"). Claim 2 depends from and further restricts independent claim 1 and therefore also distinguishes over MacNally. In rejecting claim 2, the Examiner has further applied Chalmers. Chalmers has been cited as teaching a step of splitting a signal into an in-phase (I) component and a quadrature-phase (Q) component. Applicant respectfully submits that Chalmers fails to cure the deficiencies of MacNally noted above with respect to independent claim 1. Applicant respectfully submits that dependent claim 2 distinguishes over the cited combination of MacNally and Chalmers and respectfully requests that the rejection thereof be withdrawn.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over MacNally in view of U.S. Patent No. 5,512,898 to Norsworthy et al. ("Norsworthy"). Claim 4 depends from and further restricts independent claim 1 and therefore also distinguishes over MacNally. In rejecting claim 4, the Examiner has further applied Norsworthy. Norsworthy has been cited as teaching decimating a third processed signal to produce a fourth processed signal. Applicant respectfully submits that Norsworthy fails to cure the deficiencies of MacNally noted above with respect to independent claim 1. Applicant respectfully submits that dependent claim 4 distinguishes over the cited combination of MacNally and Norsworthy and respectfully requests that the rejection thereof be withdrawn.

New claims 38-39 depend from and further restrict independent claim 1. New claims 40-41 depend from and further restrict independent claim 35. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claims 1 and 35, respectively, new claims 38-41 also distinguish over the combination of references.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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